# WEBSITE EMAIL ANTI-HARVESTING TECHNIQUES

Eddie Sparpaglione Sussex County

# What is Email Harvesting?

**E-mail Harvesting** is the process of obtaining lists of e-mail addresses using various methods for use in bulk e-mail or other purposes usually grouped as spam.

## **Anti-Harvesting Solutions**

- ·List-poisoning
- Address Munging
- Client-Side Scripting (JavaScript)
- CSS Manipulation
- Images
- Contact Form

## **List Poisoning**

Definition: poisoning a mailing list with invalid email addresses

#### Advantages

 Gives the spammer a list of fake email addresses which is useless

#### Disadvantages

- Causes problems for the mail server responsible for that address
- □ Can be avoided by spammers if they are found
- Only practical for industries using mailing lists, not individual addresses

## **Address Munging**

Definition: disguising an e-mail address to prevent it from being collected

#### Example

No-one@example.com = no-one at example dot com

#### Advantages

- Deters simple bots
- Able to be seen directly by the user

#### Disadvantages

- Makes it more difficult for users to send email to each other
- Makes the user less likely to email because it adds another step
- Many bots can still decipher this technique

## Client-Side Scripting

Definition: represent e-mail addresses as ASCII code or JavaScript-coded text

#### Advantages

 Spam-bots cannot find the address in the source code

#### Disadvantages

- JavaScript must be enabled
- Can cause problems for people with screen readers

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Example:

Using JavaScript to represent and Communication:

<script type="text/javascript">
var name = 'user';
var at = '@';
var domain = 'example.com';
document.write(name + at + domain);
</script>
```

## **CSS Manipulation**

Definition: Listing the e-mail addresses in a scrambled format and having CSS decode them

#### Advantages

- Easily reusable
- Can create your own pattern therefore harder to harvest
- Cannot harvest the address from source code

#### Disadvantages

- Cannot copy and paste the address
- Issues with accessibility tools that do not use CSS

### **Images**

Definition: Displaying the email address as an image

#### Advantages

Spam-bots do not scan images at this time

#### Disadvantages

- Cannot copy and paste the address
- User has to retype their address in their mail program, no clickable link
- Accessibility problems with screen readers and other accessibility tools

#### **Contact Form**

Definition: Display a contact form with server-side code responsible for sending email to recipient

#### Advantages

- Email address is never displayed to client
- Email address of recipient is never exposed
- Adding a CAPTCHA key keeps the form secure from auto-populating bots
- Cannot send files or attachments

#### Disadvantages

- User cannot use his preferred e-mail client to compose the message
- Cannot send files or attachments

#### Other Best Practices

#### Avoid Stereotypes

Avoid common emails such as: <u>info@domain.com</u>, <u>service@domain.com</u> & <u>admin@domain.com</u>

#### Do Not Respond

Responding to spammers confirms a valid email

#### Disable HTML

- □ This expose the user to offensive images
- Can contain web bugs which allow spammers to see that the e-mail address is valid

#### Disposable E-mail addresses

- A temporary address which forwards email to a real account, which the user can disable or abandon
- Use when giving out email to websites